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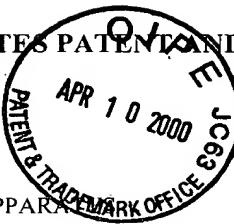
## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: Tsutomu YAMAKAWA

SERIAL NO: 09/521,901

FILED: March, 9, 2000

FOR: NUCLEAR MEDICAL DIAGNOSTIC APPARATUS



GAU:

EXAMINER:

4/I.D.S.  
G. Stanley  
5-24-00

## INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231

SIR:

Applicant(s) wish to disclose the following information.

## REFERENCES

The applicant(s) wish to make of record the references listed on the attached form PTO-1449. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.

A check is attached in the amount required under 37 CFR §1.17(p).

## RELATED CASES

Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s) is attached along with PTO 1449.

A check is attached in the amount required under 37 CFR §1.17(p).

## CERTIFICATION

Each item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.

No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

## PETITION

Applicant(s) hereby request consideration of the attached information. A check is attached in the amount of the Petition fee required under 37 CFR §1.17(i)(1).

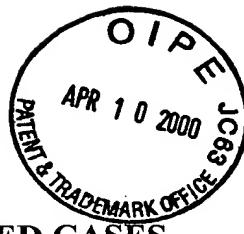
## DEPOSIT ACCOUNT

Please charge any additional fees for the papers being filed herewith and for which no check is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBOLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.Surinder SacharMarvin J. Spivak  
Registration No. 24,913Surinder Sachar  
Registration No. 34,423Fourth Floor  
1755 Jefferson Davis Highway  
Arlington, Virginia 22202  
Tel. (703) 413-3000  
Fax. (703) 413-2220  
(OSMMN 10/98)

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**LIST OF RELATED CASES**

<u>Docket Number</u>	<u>Serial or Patent No.</u>	<u>Filing or Issue Date</u>	<u>Status or Patentee</u>
PER CLIENT	4,812,656	03/14/89	YAMAKAWA, et. al.
0039-6117-2S	6,043,494	03/28/00	YAKAMAWA, et. al.
SL 0039-7037-2S	09/239,968	01/29/99	PENDING
SL 0039-7149-2S	09/277,162	03/26/99	PENDING
SL 0039-7213-2S	09/322,991	06/01/99	PENDING
0039-7608-2S*	09/521,901	03/09/00	PENDING

\*Present application; listed for information.

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DOCKET NO: 0039-7608-2S

Sheet 1 of 1

SERIAL NO: 09/521,901

Group Art Unit:

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STATEMENT OF RELEVANCY

**Reference AT (JP 11-337646) on Form 1449:**

In the radiation semiconductor detector (array) of the present invention, the semiconductor cells are highly accurately arranged at regular intervals at a high density in the column direction, the thickness of the electrode is smaller than that of the electrode of the conventional detector, and the signal processing section is provided on the motherboard side, and the scepter of the collimator and the dead zone overlap each other as much as possible. The collimator setting device of the present invention automatically adjusts the position of the collimator. Thus, the thickness of the semiconductor device in the radiation absorption direction can be changed without causing lowering of the detection sensitivity and the energy resolution, the cell density (spatial resolution) is increased, the signal processing for formation of an image (picture) is facilitated, designing of the circuit and other members is facilitated, the loss of the radiation detection sensitivity is reduced, and the position adjustment of the collimator can be facilitated.

**Reference AU (JP 11-344568) on Form 1449:**

According to the present invention, in the nuclear medicine diagnosis apparatus provided with a semiconductor detector, the position recognition accuracy for gamma rays can be improved.

**Reference AV (JP 11-344573) on Form 1449:**

In the radiation semiconductor detector (array) of the present invention, the semiconductor cells are highly precisely arranged at regular intervals at a high density in the column direction, the ratio between the distance between the cells in the module and the thickness of the module outer wall is set at 2:1, electrical wiring is incorporated into the structure, and all the members can be made as a single product. Therefore, the thickness of the semiconductor in the radiation absorption direction can be changed without causing lowering of the detection sensitivity and the energy resolution, the cell density (spatial resolution) is increased, the signal processing for formation of an image (picture) is facilitated, designing of the circuit is facilitated, the number of parts and that of assembly steps are reduced, the assembly accuracy can be improved, and the size of the product can be decreased.